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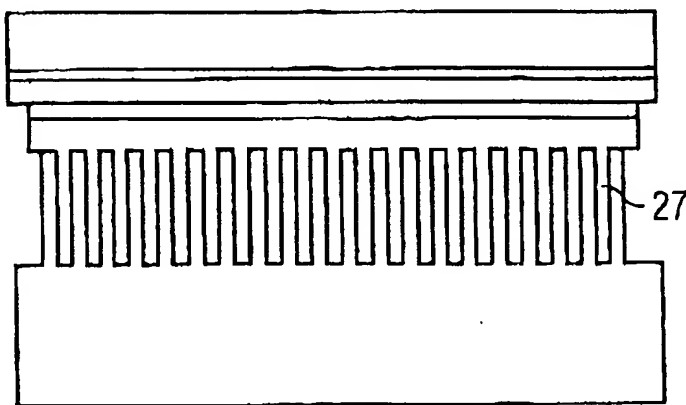
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Zur Erklärung der Zweibuchstaben-Codes und der anderen Ab-  
kürzungen wird auf die Erklärungen ("Guidance Notes on Co-  
des and Abbreviations") am Anfang jeder regulären Ausgabe der  
PCT-Gazette verwiesen.

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(54) Title: SEMICONDUCTOR COMPONENT AND PRODUCTION METHOD

(54) Bezeichnung: HALBLEITERBAUELEMENT UND VERFAHREN ZUR HERSTELLUNG



(57) Abstract: The aim of the invention is to  
reduce or compensate thermal stress created  
within a semiconductor component. Said aim  
is achieved by a semiconductor component  
comprising a light-emitting semiconductor layer  
or a light-emitting semiconductor element, two  
contact points, and a vertically or horizontally  
structured carrier substrate, and a method for  
producing a semiconductor component. Thermal  
stress is created by changes in temperature  
during processing and operation as well as due  
to the different coefficients of expansion of the  
semiconductor and carrier substrate. The inventive  
carrier substrate is structured in such a way that  
thermal stress is reduced or compensated to a  
degree that is sufficient for the component not to  
break down.

(57) Zusammenfassung: Zur Verminderung bzw. Kompensation der thermischen Spannungen im Bauelement wird ein Halbleiter-  
bauelement mit einer lichtemittierenden Halbleiterschicht oder einem lichtemittierenden Halbleiterelement, zwei Kontaktstellen und  
einem vertikal oder horizontal strukturierten Trägersubstrat, und ein Verfahren zur Herstellung eines Halbleiterbauelements entwi-  
ckelt. Die thermischen Spannungen entstehen durch Temperaturwechsel während der Prozessierung und im Betrieb und aufgrund  
der unterschiedlichen Ausdehnungskoeffizienten des Halbleiters und Trägersubstrats. Das Trägersubstrat wird so strukturiert, dass  
die thermischen Spannungen ausreichend vermindert bzw. kompensiert sind, dass das Bauelement nicht ausfällt.

WO 2004/032247 A2

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# PATENT COOPERATION TREATY

PCT/DE2003/002954

From the INTERNATIONAL BUREAU

## PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

EPPING HERMANN FISCHER  
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P.O. Box 200734  
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ALLEMAGNE

Date of mailing (day/month/year)  
15 April 2004 (15.04.2004)

Applicant's or agent's file reference  
P2002,0809WO

IMPORTANT NOTICE

International application No.  
PCT/DE2003/002954

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05 September 2003 (05.09.2003)

Priority date (day/month/year)  
30 September 2002 (30.09.2002)

Applicant

OSRAM OPTO SEMICONDUCTORS GMBH et al

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

CN, EP, JP, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

None

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 15 April 2004 (15.04.2004) under No. WO 2004/032247

4. **TIME LIMITS** for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be **30 MONTHS** from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of **19 months** from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limits), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a demand for international preliminary examination, see the *PCT Applicant's Guide*, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO  
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